



**Linda S. Adams**  
*Secretary for  
Environmental  
Protection*

## **California Regional Water Quality Control Board Central Valley Region**

**Karl E. Longley, ScD, P.E., Chair**

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**Arnold  
Schwarzenegger**  
*Governor*

**TO:** Charlie Hoppin, Chair  
State Water Resources  
Control Board

**FROM:** Pamela C. Creedon  
Executive Officer

**DATE:** 15 July 2009

**SIGNATURE:** \_\_\_\_\_

### **REPORT FOR MEMORANDUM OF UNDERSTANDING (MOU) PILOT PROGRAM**

The Memorandum of Understanding (MOU) between the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), the State Water Resources Control Board (State Water Board), the California Department of Pesticide Regulation (DPR), and the Agricultural Commissioners of Glenn County and Butte County requires the staff liaisons from the Central Valley Water Board and the Agricultural Commissioners of Glenn County and Butte County submit Quarterly Reports of the activities performed under the MOU Pilot Program.

The attached reports are summaries of the MOU Pilot Program activities performed from January to June 2009. The contracts for the pilot program have been extended and amended until 30 June 2010.

The Agricultural Commissioners and their staff have provided a front-line presence to reach out to the agricultural community and support the subwatershed and coalition groups' efforts to protect water quality. Continued funding of this program will help to determine the role of the County Agricultural Commissioners in the long-term Irrigated Lands Regulatory Program.

If you have questions regarding this Report, please contact me at (916) 464-4638 or Joe Karkoski at (916) 464-4668.

cc with Attachments A-C :

Ms. Dorothy Rice, Executive Director, State Water Resources Control Board  
Mr. Tom Howard, Chief Deputy Director, State Water Resources Control Board  
Ms. Mary-Ann Warmerdam, Director, Department of Pesticide Regulation

cc with Attachments A-D:

Mr. John Sanders, Chief, Department of Pesticide Regulation  
Mr. Mark Black, Agricultural Commissioner, Glenn County  
Mr. Richard Price, Agricultural Commissioner, Butte County  
Mr. Johnny Gonzales, Program Manager, State Water Resources Control Board

***California Environmental Protection Agency***

## **ATTACHMENT A**

### **MOU PILOT PROGRAM SUMMARY REPORT CENTRAL VALLEY REGIONAL WATER BOARD JANUARY - JUNE 2009**

#### **Summary**

This document summarizes the activities performed by Butte and Glenn County Agricultural Commissioners under the Memorandum of Understanding (MOU) Pilot Program from January to June 2009. The MOU Pilot Program was initiated in December 2005 to support the Irrigated Lands Regulatory Program (ILRP). This pilot program has progressed from inspecting management practices at individual farms to surveying and mapping management practices in a watershed; to include an evaluation of the effectiveness of management practices in Pine Creek and Walker Creek. In addition, the County Agricultural Commissioners and their staff coordinate efforts with the subwatershed and coalition groups' Management Plan implementation to address exceedances of water quality objectives. For example, the County Agricultural Commissioners and their staff have been working with the subwatershed groups and the Sacramento Valley Water Quality Coalition (Coalition) to identify the possible sources of water quality exceedances and to identify management practices that could be implemented to mitigate the exceedances.

Attachments B and C are reports from the Butte and Glenn County Agricultural Commissioners summarizing their activities in support of the ILRP for these two quarters (January – June 2009). Attachment D contains the reports evaluating the effectiveness of management practices in two surveyed subwatersheds.

At this time, the MOU Pilot Program will continue to 30 June 2010 and will expand to include other County Agricultural Commissioners through subcontracts.

#### **Background**

The Memorandum of Understanding that established the Pilot Program was signed on 29 June 2005 by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), the State Water Resources Control Board (State Water Board), the California Department of Pesticide Regulation (DPR), and the Agricultural Commissioners of Glenn County and Butte County. The MOU specifies the Central Valley Water Board contract directly with the Butte and Glenn County Agricultural Commissioners to support activities related to the ILRP. The MOU was renewed on 29 June 2007 with minor revisions to be effective for four additional years. In 2011, the MOU will be reviewed by all parties to assess its effectiveness in addressing water quality impacts as described in the ILRP. Upon completion of the review, the MOU may be renewed, revised, or terminated.

#### **Program Support from Agricultural Commissioners and Their Staff**

The 2008 Annual Report for the MOU Pilot Program noted that the Agricultural Commissioners and their staff contributed to the ILRP in three areas: outreach and communications, management practices surveys, and interaction with other agencies.

In these two quarters (January-June 2009), the Agricultural Commissioner staff has continued to provide support in the three identified areas. Their efforts have expanded across county lines with the management surveys for Logan Creek, a cooperative effort between Glenn and Colusa County Agricultural Commissioners. To evaluate the effectiveness of management practices for Logan Creek, the Coalition has been monitoring the drainage since 2008.

The Butte County Agricultural Commissioner completed the upper Pine Creek management practices survey in Tehama County. The management practices survey was then performed on Honcut Creek, a water body between Butte and Yuba counties. Again, the Agricultural Commissioners' staff from the two counties collaborated in performing the survey.

The reports evaluating the effectiveness of management practices at Walker Creek and Pine Creek are in Attachment D. The reports identify communication as the key to using the information from the management practice surveys effectively. Communication between the Agricultural Commissioners, the subwatershed group, the coalition group, and the growers will determine how information will be used or distributed. Another area that was identified as needing more input was guidance in determining performance measures for the "effectiveness" of management practices.

### **Central Valley Water Board Work under the MOU**

Central Valley Water Board staff participated in a tour of the Colusa-Glenn Subwatershed that included a presentation by the Glenn Agricultural Commissioner's staff on their work in Walker Creek.

Central Valley Water Board staff has also been working with the Agricultural Commissioners on the long-term program for the ILRP. Discussions have included face-to-face meetings, phone calls, and conference calls.

Request to extend and amend the MOU contracts were temporarily suspended by the Governor's order. The requests were processed and are awaiting approval at the Agricultural Commissioners' office.

### **Program Status and Proposed Future Work**

The 2008 contracts for the MOU Pilot Program were extended and amended to end 30 June 2010, and are awaiting approval by the Agricultural Commissioners.

Work for the next year will continue to focus on supporting the ILRP. The role of the Agricultural Commissioners' staff will become more compliance-oriented to support the ILRP. Agricultural Commissioners' staff will inspect parcels where growers claim an exemption from the ILRP conditional waiver based on no discharge to surface water. Central Valley Water Board ILRP staff presently does a limited number of these inspections due to staff limitations.

It is further expected that the Agricultural Commissioners' staff will aid in determining if other parcels may be exempt from the ILRP due to no irrigation or non-commercial use.

Glenn and Butte County Agricultural Commissioners will also be called upon to help define and evaluate potential roles of Agricultural Commissioners in the long-term program for the ILRP. The county agricultural commissioners will play an important role in the long-term ILRP. The MOU Pilot Program will allow the agricultural commissioners to determine how the goals of the long-term ILRP could be met by their present responsibilities and the areas that will need to be better defined and funded.

As the MOU Pilot Program expands into other counties through internal agreements and contracts, the skills and lessons learned in the MOU Pilot Program will be passed on. Skills and lessons learned include the training to use Geographical Information Systems (GIS) and how to find and organize information from the Central Valley Water Board, the county planning department, the county assessor's office, and other agencies to document management practices, irrigation practices, crop types, pesticide use, and parcel locations.

**ATTACHMENT B**  
**MOU PILOT PROGRAM SUMMARY REPORT**  
**BUTTE COUNTY DEPARTMENT OF AGRICULTURE**  
**JANUARY - JUNE 2009**

As required by contract # 07-079-150, the Butte County Department of Agriculture (Butte County) is to provide the Regional Water Quality Control Board, Central Valley (Central Valley Water Board) with a quarterly report of activities as it relates to the scope of work for the Irrigated Lands Regulatory Program (ILRP) contract.

Task 1) *Provide information/maps and inspect and investigate sites for the ILRP as authorized by the Central Valley Water Board.*

Butte County continues to update the GIS map data and gather hydrological information relevant to the ILRP. This sub-task is ongoing.

Task 2) *Inspect, assess and document management practices used in agricultural operations to protect water quality.*

**Pine Creek Watershed:**

Due to the July contract suspension, the Tehama County component of the Pine Creek watershed surveyed for existing management practices was delayed. The final field inspections were not completed until March of 2009, the evaluation and report writing continued in to May.

**Honcut Creek Watershed:**

Due to the July contract suspension, the Honcut Creek watershed surveyed for existing management practices was suspended in order to deal with the back log of work on the management practice report. This task is not yet complete.

**Sub Task B: The Management Practices (MP) Report**

The organization of the MP report was reformulated; the second draft was completed and forwarded to the Central Valley Water Board contract manager on June 8<sup>th</sup> 2009. The report will continue to be updated until the contract is concluded.

Task 3) *Assist the Regional Water Board in evaluating sample monitoring points for agricultural wastewater discharges within the Sacramento Valley. Assist in investigating exceedances at monitoring sites*

**Cherokee Canal Monitoring site:**

A new up-stream sampling location for the Cherokee Canal in the BYS sub-watershed was evaluated on March 13, 2009 for the RWQCB, CRC and SVWQC.

Task 4) *Conduct and/or coordinate public education outreach programs on the ILRP, conduct and/or coordinate outreach to growers and stakeholders' on management practices that protect water quality and document and evaluate management practices within the watershed.*

Handouts and brochures that explain the Ag Waiver, the ILRP and Coalition efforts and activities within sub-watersheds, continue to be provided at pesticide permit appointments.

The Pine Creek management practices evaluation was delayed due to the back log of work caused by the July contract suspension. The evaluation and report writing continued into May. The Evaluation Report will likely be completed June 20, 2009.

Task 5) *Work with stakeholders, including other agencies, on development and implementation of management practices*

Butte County has continued coordination with the adjacent County Agricultural Commissioners offices and with members of the Butte-Yuba-Sutter watershed, the Resource Conservation Districts, NRCS and many other agencies regarding various aspects of the ILRP and activities that address and explore issues, promulgate knowledge concerning water quality and the agricultural industry.

Butte and Glenn County staff in conjunction with the Butte Water and Resource Conservation Department provided an ILRP update and collaborative project proposal to DPR staff April 20, 2009

The meeting shared county ILRP program information and explored future strategies and alternatives concerning county level issues of management practices evaluation and management plan implementation.

Butte County staff has attended, participated in and organized ILRP and long term ILRP related function and meetings throughout the contract year. A total of 32 such activities are documented in the first two quarters of 2009 to date:

- 7 ILRP/RWB meetings
- 8 watershed and SVWQC meetings
- 4 RDC and NRCS meetings
- 5 grower ILRP out-reach functions
- 8 other ILRP affiliated meetings

#### Recommendations:

For this program a great deal of time has been spent on report writing; 12 Monthly reports, 4 Quarterly reports and an Annual program summary report, 17 reports per program year. This does not take into account field inspections reports, survey and monitoring site reports and other miscellaneous reports. It appears that a lot of the information is redundantly reported and as much time is spent writing reports and attending meeting compared to actual field

work. I suggest streamlining the reporting and invoicing activities to either monthly or quarterly.

In some cases it appears the county agricultural departments may have to, more actively, pursue the local watershed organization in order to stimulate ILRP related interaction. Some kind of friendly policy direction from the SWRCB to the watershed groups, regarding this topic, may be useful. No information has been received from the Butte-Yuba-Sutter watershed regarding the status of Pine Creek Management Plan.

Local watershed organizational issues:

Recently the Butte-Yuba-Sutter watershed hired a manager, hopefully interaction with other stakeholders and watershed entities under the ILRP and its various MOUs will now improve.

Mid year (2008) county contract suspension and remaining work load:

The Butte County ILRP program work was suspended from August 1<sup>st</sup> to October 16<sup>th</sup>. This caused a back log in program activities and prevented a number of agreement tasks from being completed in a timely manor.

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## **ATTACHMENT C**

### **MOU PILOT PROGRAM SUMMARY REPORT GLENN COUNTY DEPARTMENT OF AGRICULTURE JANUARY - JUNE 2009**

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) has adopted a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Resolutions No. R5-2003-015 & R5-2006-0053) herein referred to as the Irrigated Lands Regulatory Program (ILRP). In an effort to integrate resources, a Memorandum of Understanding (MOU) between the California Department of Pesticide Regulation, the Agricultural Commissioners of Butte and Glenn Counties, the Central Valley Regional Water Quality Control Board (Regional Water Board) and the State Water Resources Control Board was developed. This MOU applies to a pilot program initiated with Glenn and Butte Counties. These two counties, under the jurisdiction of the Regional Water Board, initiated activities throughout the Sacramento River Basin in support of the ILRP.

The initial contract 05-182-150-0 was entered into in July 2005 following development of the initial MOU. A renewed contract 07-078-150-0 was entered into in April 2008. The MOU was renewed in June 2007. The current contract is set to terminate 30 June 2009. The contract is the basis for cooperation between the Regional Water Board and the Glenn County Agricultural Commissioner (GCAC) to perform tasks requested by the Regional Water Board in support of the ILRP.

#### **January –March 2009**

This quarter Glenn County staff has continued with the Best Management Practices (BMP) Watershed Evaluation in the Logan Creek area of Glenn and Colusa Counties. The data collected in the field have been entered into Arc View and are nearly complete. It is expected to be submitted to the Central Valley Board in late June 2009.

Glenn County staff has also been working with the Colusa County Department of Agriculture and their staff with the Best Management Practices Watershed Evaluation in the Freshwater Creek of Colusa County. Colusa County staff has been performing field evaluations and entering the data into Access, which will then be followed up with fields being entered into Arc View. It is anticipated that the evaluation may be completed by September 2009 and submitted to the Central Valley Water Board at that time. Glenn County was encouraged to provide training to Colusa County staff with the anticipation this type of evaluation would be of value to the Sub-watersheds of the Sacramento Valley Water Quality Coalition (SVWQC) in the future. Additional funding to continue this evaluation is in question after the second quarter of 2009 is completed.

Glenn County staff continues to enjoy a great working relationship with the Colusa Glenn Sub-watershed and provides outreach and education services to them and the SVWQC by participating in their meetings and discussing assistance that may be provided under the Pilot Program. One such task completed by Glenn County staff was the development of an



Outreach Parcel Map. The map shows the parcels in the Glenn County portion of the Colusa Glenn Sub-watershed that are participants in the SVWQC. This would be helpful to the sub-watershed in targeted outreach to certain areas if necessary. Staff also participated in the planning and presentation of a Sub-watershed tour for Central Valley Water Board staff. There was a morning presentation on Pilot Program efforts followed by a tour of selected SVWQC monitoring locations.

Glenn County staff participated in a tour of the Sacramento National Wildlife Refuge with Sub-watershed staff with the intention of furthering the efforts of both organizations in water quality activities. The refuge is fully contained within the Logan Creek area of Glenn and Colusa Counties.

The Glenn County Agricultural Commissioner has been working with other commissioners, the Department of Pesticide Regulation, the California Rice Commission, other SVWQC sub-watersheds, and the Central Valley Water Board on the Long-Term Program and the role that each will play as the program is developed. Of particular concern to all involved are the inclusion of a groundwater component and the possibility of escalating the Pilot Program in a quasi-regulatory direction.

It is anticipated that during the next quarter Glenn County staff will be focusing their efforts on the Long-Term program, other tasks assigned by the Central Valley Water Board and continued contract discussions as this phase of the Pilot Program comes to a close in June 2009.

#### **April – June 2009**

The BMP watershed evaluation for Logan Creek in Glenn County is close to completion. Colusa County staff is currently linking their Access and Arc View data files for the Freshwater Creek BMP watershed evaluation.

Glenn County staff was requested to provide Central Valley Water Board staff with label searches into herbicide products that contain MCPA and its use on rice. The research determined that there are currently no products registered with the Department of Pesticide Regulations for use on rice in California. From this, the California Rice Commission issued a reminder to northern California Agricultural Commissioners that all use of the product on rice has been cancelled.

Glenn County staff was requested to perform an evaluation of a property that the owner thought was not subject to the IRLP and did not need to be enrolled in the Colusa Glenn Subwatershed. Staff determined the property was not able to produce runoff due to 2-4-foot berms in the down-gradient direction surrounding the field on three sides. This was the first time this type of request was made and it proved to be very helpful to the Subwatershed, the Central Valley Water Board, and it also provided staff the opportunity to interact with property owners on this issue.

Glenn County staff was contacted by Rheyna Laney, of Sonoma State University who has received a research grant from the CA Department of Fish and Game to look into issues surrounding the IRLP. The meeting was held in Willows with the Colusa Glenn Subwatershed coordinator. There was discussion on farming systems, outreach and education plans, the spatial scope for targeted outreach for exceedances, and BMPs in general. She was very interested in the type of BMP Evaluations being performed in the Subwatershed and was interested in seeing something similar being performed in other areas. After the meeting, a tour of the Subwatershed and Coalition monitoring locations was provided. At the conclusion of the meeting it was determined that a closer look at activities taking place in other coalitions would be necessary prior to moving forward.

The Long-Term program continues to be a focus for the future of the Pilot Program between the Agricultural Commissioners, the Central Valley Water Board, and the Department of Pesticide Regulation. In order to ease out of a conditional waiver and into an established program, the Commissioners may be assuming a regulatory role to assist the Central Valley Water Board with compliance issues.

The current contract between the Central Valley Water Board and the Agricultural Commissioners of Glenn and Butte Counties will expire June 30, 2009 and a new one year contract will be put in place on July 1, 2009.

## **ATTACHMENT D**

**Butte County Agricultural Department  
Pine Creek MP Evaluation  
2008-2009  
for the  
Irrigated Lands Regulatory Program**

Pursuant to Contract agreements #07-079-150-0, exhibit "A" (Scope of Work)

**Introduction:**

As part of the contract the Agricultural Commissioner of Butte County agreed to provide services to the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to support the Irrigated Lands Regulatory Program (ILRP), specifically: (Task 3,B...*Work with the SVWQC on follow-up action when monitoring indicates water quality problems. Assist in identifying Management Practices (MPs) that may mitigate the water quality problems. Document the effectiveness of the implemented practices.*) and (Task 4...*document and evaluate management practices within the watershed.*)

**Evaluation of Management Practices and Related Topics:**

**The Pine Creek Management Plan Issue:**

On August 21-23, 2007 the Sacramento Valley Water Quality Coalition (SVWQC) sampling at the Pine Creek monitoring site recorded a second exceedance of chlorpyrifos and E. coli, which triggered a Management Plan requirement. Follow-up to the sampling by the Butte County Agricultural Department (BCAD) seemed to indicate that the sampling procedures, although they were followed correctly, may have allow for an inappropriate sampling event. The absence of recordable flow through the entire channel was an issue. Additionally inappropriate comments (indicating irrigation discharge) were documented on the sampling form. Never-the-less, a Management Plan was triggered for Pine Creek in the Butte-Yuba-Sutter Water Quality Coalition, watershed (BYS).

This sampling protocol issue may merits further investigation. Proceeding with sampling in a narrow watercourse when there is no registered flow, seems problematic.

Following this event, on October 10, 2007 Butte staff (the Deputy Ag Commissioner) met with representative from the BYS. This meeting was an initial response strategy for the development of the Pine Creek Management Plan. BCAD provided and demonstrated the Pine Creek Management Practices Survey, its data, procedures and documents (that were developed under the ILRP pilot program) to the BYS watershed, the Sutter County Resource conservation District (RCD) and the Coalition for Urban/Rural Environmental Stewardship (CURES) Executive Director. The survey appears to support and address requirements mentioned in the management plan, specifically:

**The Management Plan shall:**

- Evaluate the effectiveness of existing management practices in achieving water quality standards.
- Identify additional Coalition actions including different or additional management practices.
- Identify education and outreach that its participants or Coalition propose to implement.

Incidentally, the MP survey procedure and methods were adapted for use in other counties as a result of this meeting and promulgation of the data.

Since that meeting, beyond a few phone calls from CURES to clarify the survey procedures, there has been no further significant or notable interaction, regarding the Pine Creek Management Plan, between The BYS sub-watershed and the Butte County Agricultural Department.

There have been regular email contacts from the SVWQC regarding the Coalition's Draft Management Plan. The components of that plan appear to be appropriate for the Pine Creek event. The requirement in the Plan for a "designated person" to administer the Plan has apparently been satisfied with the recent appointment of a BYS watershed manager.

Never-the-less, the status of the Pine Creek Management Plan and whether or not additional management practices have been promoted or implemented by BYS is not clear to the Butte County Agricultural Department.

The Sutter County RCD did apply for a Prop 50 grant (BYS and BCAD listed as partners) which contained in its goals and objectives MP analysis and implementation projects that likely would have been directed to Pine and Honcut Creeks, being the two watersheds with prior exceedances. This grant would have supported development of the Management Plan but apparently the grant was not funded.

**Knight Ranch Discharge Issue:**

During the lower Pine Creek Management Practices Survey one irrigation water discharge was observed (Ref: Knight Farms Inspection Report 7/6/07). This event became an exercise in the reliability and accessibility of Coalition, sub-watershed and CVRWQCB records keeping for the ILRP pilot program and its various components. The land steward was found to be in complete compliance. However, existing management practices were augmented at the site and verified on a follow up site inspection by Butte County Ag staff on 6/20/08. The improvements included: removing the excess brush that obscured the overflow gate and discharge pipe. More weir boards were placed in the gate and the holding ditch was deepened at the discharge end. Water was present in the holding ditch but not discharging to Pine Creek.

### **Evaluation of Management Practices Effectiveness:**

As often stated; documentation of acceptable water quality or the demonstration of improvement in water quality is required to definitively measure the effectiveness of any management practice employed to mitigate water quality issues.

The results from water quality assessment studies required to demonstrate an MP's effectiveness are time dependent. Clearly, as just demonstrated, properly implemented category one\* management practices make a difference when discharge alone is the issue.

### **Suggestions to Mitigate Exceedance in Pine Creek:**

The Pine Creek MP survey demonstrated that certain MPs, which obviously would prevent discharge, have a low frequency of use in the area. In example; discharge retention structures, ditches and water holding areas and discharge control devices have a frequency of use in the survey area of 30% and 43% respectively.

It is the Butte County Agricultural Departments' opinion and recommendation that the ILRP Management Practices Report and The Management Practices Survey process be used as analytical tools in addressing the mitigation of discharge and exceedance in the Butte-Yuba-Sutter Watershed.

\* Category one: Management practices which are obvious and directly observable are often related to surface engineering, construction and design and will provide practical control of discharge from the agricultural operation.

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**EVALUATION OF EFFECTIVENESS OF MANAGEMENT PRACTICES  
FOR THE PROTECTION OF WATER QUALITY  
IN THE WALKER CREEK WATERSHED  
GLENN COUNTY, CA**

**Background**

The Walker Creek watershed of Glenn County was the subject of a Best Management Practices (BMP) Evaluation during the 2006-2007 growing season. The evaluation was conducted under the MOU Pilot Program and the associated contract with the Regional Board in support of the Irrigated Lands Regulatory Program (IRLP). The final report was submitted in May 2008 and was presented to the IRLP Technical Issues Committee in August 2008<sup>1</sup>. The major task in the evaluation was to visually inspect all agricultural fields contained within the watershed where feasible and assess the potential of the practices being utilized to benefit water quality and the second step was to correlate the effectiveness of the observed practices to the sampling results of Sacramento Valley Water Quality Coalition (SVWQC) monitoring at the base of the watershed.

**Summary**

In November 2005, baseline water quality samples were collected at the selected SVWQC monitoring location at the intersection of County Road 48 in Willows, CA at the Walker Creek crossing. Collected samples were analyzed for pesticides according to the requirements of the Regional Board's Basin Management Plan and SVWQC Monitoring and Reporting Plan. Results of these baseline samples indicated there were no pesticides present.

The most consistently used management practices that were documented that provide water quality benefits are identified as:

- Planted or resident vegetation end of field buffer strips
- Planted or resident vegetation orchard row middles
- Vegetated waterways adjacent to fields
- Mix and load location placement far from waterways
- Numerous irrigation methods
- Recirculation and tail water recovery systems
- Berm placement that contains potential runoff
- Constructed wetland areas
- Various methods of soil management and tillage

The agricultural operations of the watershed encompass 26,000 acres consisting of 394 separately farmed fields operated by 140 individual growers. During the course of the evaluation, SVWQC monitoring continued through the storm and irrigation seasons with favorable sampling results except for two exceedances of chlorpyrifos in August and September 2007.

(1) [http://www.swrcb.ca.gov/centralvalley/water\\_issues/irrigated\\_land/ag\\_commissioners\\_pilot/walker\\_creek\\_bmp\\_eval\\_may\\_2008.pdf](http://www.swrcb.ca.gov/centralvalley/water_issues/irrigated_land/ag_commissioners_pilot/walker_creek_bmp_eval_may_2008.pdf)

Also during the evaluation time frame, (September 2006-September 2007) there were 228,000 pounds of active ingredient of all pesticides applied within the boundaries of the watershed and there were no other active pesticide exceedances detected except in the February 2008 flood event. Sample analysis of this event indicated a breakdown product of DDT was present in a water sample at the sample location but was not detected during the remaining SVWQC sampling events ending in September 2008. The vicinity of the sampling location was a popular area to grow clover and repeated applications of DDT were necessary to control lygus bugs. DDT has not been used as an agricultural pesticide in Glenn County for over 35 years and may only be present during subsequent flood events due to the amount of sediment released.

Glenn County's agricultural producers subject to the IRLP are members of the Colusa Glenn Subwatershed Program (Subwatershed) of the SVWQC. At the request of the Subwatershed, Glenn County staff provided valuable outreach as a response to the August and September 2007 exceedances of chlorpyrifos from the Walker Creek monitoring location. The information that was gathered during the BMP evaluation and how it was assembled was essential to the outreach that needed to be performed to all users of chlorpyrifos during the time of the sampling events. By reviewing the County's pesticide use reports for chlorpyrifos applications, the grower fields and applicators were identified. In addition, a list of all recorded users of chlorpyrifos was assembled, and in January 2008 a meeting was organized by the Subwatershed where attendees were presented with an overview of the watershed evaluation and how it would be useful for identifying potential and actual threats to waterways from pesticides. Growers, applicators, and pesticide control advisors were provided with an easy-to-understand presentation on the effectiveness of gathering data for spatial analysis and discussion. (See Attachment A – Walker Creek Watershed Water Quality Workshop Meeting Information and Continuing Education and Outreach)

The favorable results of the meeting produced positive feed back on the utility of this type of evaluation and demonstrated its value in assisting the Subwatershed and the SVWQC in complying with the ILRP and required management plans.

### **Conclusion**

Results of the baseline sample analysis and repeated monitoring for a two year period from the Walker Creek SVWQC monitoring location, it can be assumed that the visual management practices observed in the watershed evaluation clearly have a beneficial effect on water quality. In recognition of the 228,000 lbs of active ingredient of all pesticides applied during the evaluation time frame it can also be pointed out that the most obvious management practice being employed by growers centers around the importance of pesticide use at the time of economic thresholds and the proper application of the selected materials according to labels and regulations.

Cost effective management practice implementation followed up with monitoring and a comprehensive program of education and outreach should provide effective water quality in



any watershed and contribute to improvement when the information provided is positive and consistent.

### **Recommendations**

There is a lot to be said for getting pesticides on the intended target while at the same time taking advantage of cultural practices that are put in place for underlying economic reasons. The value of this type of evaluation can provide a level of importance that would be missed if it had not been done when the information needed is necessary.

To assess the effectiveness of management practices there would have to be baseline information collected prior to the development of an agricultural operation that would in turn use pesticides in a manner that may or may not have the ability to reach a water way and determine the concentration that would have a detrimental effect on water quality. An alternate method to this idea would be to recklessly perform the same pesticide applications in a consistent manner on the same crops in a similar area without any control over your actions and utilize end of field monitoring techniques and compare results.

Prior to undertaking a watershed evaluation where effectiveness of practices observed is in question, additional decision making tools need to be identified or developed to define performance measures. There is currently no effectiveness measuring tools available short of identifying what has worked in the past to remedy previously unfavorable monitoring results.

## **Attachment A**

### **Walker Creek Watershed Water Quality Workshop Meeting Information and Continuing Education and Outreach**

1. Exceedance Notice
2. Meeting Announcement, January 16, 2008
3. Chlorpyrifos use in Walker Creek Watershed-July-Sept. 2007
4. Growers identified that applied Chlorpyrifos- July-Sept. 2007
5. Growers targeted for outreach
6. Sign up sheet for attendees
7. Fields identified as using Chlorpyrifos- July-Sept. 2007
8. Follow-up Outreach Notice, May 2008
9. Follow-up Outreach Notice, July 2008
10. Farm Bureau Outreach, August 2008
11. Follow-up Outreach Notice, May 2009
12. Press Release, June 2009



## EXCEEDANCE NOTICE

from  
Sacramento Valley Water Quality Coalition  
and  
Colusa Glenn Subwatershed Program

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### WALKER CREEK WATERSHED

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*Enclosures*

1. **Advisory Notice of Exceedances**
  2. **Workshop Notice**
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December 21, 2007

Water quality testing of the Walker Creek Watershed is currently being performed by the Sacramento Valley Water Quality Coalition (SVWQC), with the assistance of your local subwatershed group, the *Colusa Glenn Subwatershed Program*. The Event 23 (August 2007) and Event 24 (September 2007) irrigation samplings showed exceedances of state water quality objectives for chlorpyrifos (trade names include Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E). As a result of these exceedances, the Central Valley Regional Water Quality Control Board (Water Board), under the Irrigated Lands Regulatory Program, is requiring that the SVWQC notify landowners upstream of the sampling site about the water quality exceedances and potential causes. In addition, a Management Plan is required to be developed in order to address this problem. You can help correct the water quality problem, and potentially keep monitoring to a minimal, by doing the following:

**Attend a workshop on January 16, 2008.** The workshop will describe the test results, possible causes, and research and implementation of Best Management Practices (BMPs).

**Monday Afternoon Club**  
**120 North Lassen Street, Willows**  
**9:00 a.m. to 10:30 a.m.**  
**Refreshments provided**

**Who is attending?** All growers in the Walker Creek Watershed that have Almonds, Alfalfa, and transplant nursery crops. All Pest Control Advisors and Commercial applicators of the growers

**Why should I bother?** Grower, PCA, and PCO participation at workshops, growers completing Management Practice surveys and more importantly, adopting BMPs on lands contributing to farm runoff problems, are key success measures for you, the SVWQC, and Colusa Glenn Subwatershed Program to comply with the Irrigated Lands Regulatory Program. Failure to solve water quality problems through watershed-wide efforts will eventually lead to regulations requiring individual permitting of each farm operation by the Water Board.

If you are a grower and have not received and returned a Management Practice Survey from the Glenn County Department of Agriculture during your last pesticide permit renewal, please contact Lester Messina, Glenn County Department of Agriculture at 934-6501.

**Larry Domenighini**  
Colusa Glenn Subwatershed Program, President  
(530) 934-8036

**Mark Black**  
Agricultural Commissioner  
(530) 934-6501

With technical assistance from:

### County of Glenn Department of Agriculture

**Mark D. Black**, Agricultural Commissioner  
Sealer of Weights & Measures

**Jean S. Miller**, Assistant Agricultural Commissioner  
Sealer of Weights & Measures

Sacramento Valley Water Quality Coalition  
&  
Colusa Glenn Subwatershed Program

## **WALKER CREEK WATERSHED WATER QUALITY WORKSHOP**

When: Wednesday, January 16, 2008

Where: Monday Afternoon Club  
120 North Lassen Street  
Willows, CA 95988

Time: 9:00 AM to 10:30 AM

Questions? Please call (530) 934-8036 for more information.

With technical assistance from:

**County of Glenn Department of Agriculture**

Mark D. Black, Agricultural Commissioner  
Sealer of Weights & Measures

Jean S. Miller, Assistant Agricultural Commissioner  
Sealer of Weights & Measures



## Chlorpyrifos Walker Creek

Date	Township	Range	Section	Product	Amount	Unit
7/1/2007	21N	04W	24	LORSBAN-4E	300	GA
7/2/2007	21N	04W	16	CHLORPYRIFOS 4E AG	20	GA
7/3/2007	21N	04W	15	CHLORPYRIFOS 4E AG	135.7	GA
7/5/2007	21N	03W	21	LORSBAN 4E-HF	101.5	GA
7/5/2007	21N	03W	28	LORSBAN 4E-HF	70	GA
7/5/2007	21N	04W	15	CHLORPYRIFOS 4E AG	112.25	GA
7/5/2007	21N	04W	15	CHLORPYRIFOS 4E AG	53.75	GA
7/6/2007	20N	03W	13	LORSBAN-4E	14	PT
7/6/2007	21N	03W	26	LORSBAN-4E	87	PT
7/6/2007	21N	04W	10	CHLORPYRIFOS 4E AG	128.5	GA
7/7/2007	21N	03W	6	WHIRLWIND	1200	PT
7/7/2007	21N	03W	6	WHIRLWIND	1200	PT
7/7/2007	21N	04W	2	CHLORPYRIFOS 4E AG	94	GA
7/9/2007	21N	03W	4	LORSBAN-4E	11.5	GA
7/9/2007	21N	03W	26	LORSBAN 4E INSECTICIDE	5	GA
7/9/2007	21N	04W	12	CHLORPYRIFOS 4E AG	101	GA
7/10/2007	21N	04W	9	CHLORPYRIFOS 4E AG	42	GA
7/10/2007	21N	04W	10	CHLORPYRIFOS 4E AG	15	GA
7/10/2007	21N	04W	13	CHLORPYRIFOS 4E AG	49.25	GA
7/11/2007	20N	03W	23	LORSBAN 4E-HF	6	GA
7/11/2007	21N	04W	12	CHLORPYRIFOS 4E AG	101	GA
7/12/2007	20N	03W	23	LORSBAN 4E-HF	20	GA
7/12/2007	21N	04W	15	CHLORPYRIFOS 4E AG	135.7	GA
7/13/2007	21N	04W	15	CHLORPYRIFOS 4E AG	112.25	GA
7/13/2007	21N	04W	16	CHLORPYRIFOS 4E AG	20	GA
7/14/2007	21N	03W	32	LORSBAN-4E	74	GA
7/14/2007	21N	04W	10	CHLORPYRIFOS 4E AG	128.5	GA
7/14/2007	21N	04W	23	LORSBAN 4E INSECTICIDE	200	GA
7/15/2007	22N	03W	28	LORSBAN-4E	92	PT
7/16/2007	20N	03W	3	CHLORPYRIFOS 4E AG	25	GA
7/16/2007	20N	03W	3	CHLORPYRIFOS 4E AG	25	GA
7/16/2007	21N	04W	2	CHLORPYRIFOS 4E AG	94	GA
7/17/2007	21N	04W	9	CHLORPYRIFOS 4E AG	42	GA
7/17/2007	21N	04W	10	CHLORPYRIFOS 4E AG	15	GA
7/17/2007	21N	04W	15	CHLORPYRIFOS 4E AG	53.75	GA
7/19/2007	21N	04W	13	CHLORPYRIFOS 4E AG	49.25	GA
7/20/2007	21N	03W	9	LORSBAN-4E	70	GA
7/20/2007	21N	03W	18	NUFOS 4E	72	PT
7/21/2007	20N	03W	12	NUFOS 4E	10	QT
7/23/2007	21N	03W	4	LORSBAN-4E	4	GA
7/23/2007	21N	04W	13	LORSBAN 4E-HF	7.5	GA
7/24/2007	20N	03W	10	LORSBAN-4E	110	QT
7/26/2007	21N	04W	2	LORSBAN 4E-HF	94	GA
7/27/2007	21N	04W	8	LORSBAN 4E-HF	77.25	GA
7/27/2007	21N	04W	13	LORSBAN 4E-HF	53.5	GA
7/27/2007	21N	04W	16	LORSBAN 4E-HF	47.75	GA
7/28/2007	21N	04W	15	LORSBAN 4E-HF	135.7	GA
7/30/2007	21N	04W	15	LORSBAN 4E-HF	112.25	GA



GROWER	PERMIT NUMBER	Crop	Site Number	Acres	Primary ID
BIG W ORCHARD	1100096	ALMOND	8	439	290
BIG W ORCHARD	1100096	ALMOND	1	377	283
BIG W ORCHARD	1100096	ALMOND	2	408	284
BIG W ORCHARD	1100096	ALMOND	7	238	289
BIG W ORCHARD	1100096	ALMOND	3	214	362
BIG W ORCHARD	1100096	ALMOND	9	449	288
CARRIERE AND SONS	1100409	ALMOND	9AL	72	306
CHAMBERS, TOM	400003	ALMOND	1	79	NS08
CROWN NURSERY	5200209	OUTDOOR TRANSPLANT	3	20	21
CROWN NURSERY	5200209	OUTDOOR TRANSPLANT	4	20	132
KENNEDY/COUTO	1100183	ALFALFA	4	70	66
KENNEDY/COUTO	1100183	ALFALFA	11	27	68
M & B RANCHES	5800272	ALMOND	1	140	267
THIARA, HARDIAL SINGH	1100042	ALMOND	1	24	385
VON BARGEN, SCOTT	1100818	ALFALFA	3	160	127
WATTS, PAUL M	1100213	ALFALFA	2	35	159

Total Acres

2772



<u>GROWER</u>	<u>CONTACT NAME</u>	<u>MAILING ADDRESS</u>	<u>CITY STATE</u>	<u>ZIP</u>	<u>CONTACT PHONE NUMBER</u>
ALPHA GROWERS	MIKE PERRY	PO BOX 607	ORLAND, CA	95963	865-7676
ALVES FARMS	GARY ALVES	2611 COUNTY RD T	GLENN, CA	95943	934-4847
AURORA GROWERS	MIKE PERRY	PO BOX 607	ORLAND, CA	95963	865-7676
BIG W ORCHARD	JOHN WILLIAMS	5919 COUNTY RD 25	ORLAND, CA	95963	865-1403
CARRIERE AND SONS	GARY ENOS	1640 HWY 45	GLENN, CA	95943	934-7454
CHAMBERS, MIKE	MIKE AND BEN CHAMBERS	PO BOX 1184	DURHAM, CA	95938	345-1720
CHAMBERS, R.J.	RAYMOND (RJ) CHAMBERS	5660 ANITA ROAD	CHICO, CA	95973	895-3084
CHAMBERS, TOM	TOM CHAMBERS	9712 MCANARLIN	CHICO, CA	95938	343-5729
CRYSTAL ORCHARDS	MIKE PERRY	PO BOX 607	ORLAND, CA	95963	865-7676
EMBREY, LARRY	LARRY EMBREY	PO BOX 772	ORLAND, CA	95963	865-2118
F.T.C	ROBERT FLASH/ NORTH STIMPLE	11591 MERIDIAN ROAD	CHICO, CA	95973	826-3317
HALE, JIM	JIM HALE	PO BOX 0220	ARTOIS, CA	95913	934-4573
HANKS, DICK	DICK HANKS	PO BOX 217	ORLAND, CA	95963	865-7858
KAISER, LEONARD/ BERNHARDT	LEONARD KAISER	PO BOX 103	ARTOIS, CA	95913	934-7578
KALKAT ORCHARD CO.	SONNY KALKAT	3224 GRANITE DRIVE	YUBA CITY, CA	95993	673-6661
KENNEDY/COUTO	DAN KENNEDY	1669 COUNTY ROAD V	GLENN, CA	95943	934-7426
M & B RANCHES	ROBERT & MOHINDER BAINS	3443 S. WALTON AVE	YUBA CITY, CA	95993	674-1167
MAGNUM GROWERS	MIKE PERRY	PO BOX 607	ORLAND, CA	95963	865-7676
MAPCO FARMS	MIKE PERRY	PO BOX 607	ORLAND, CA	95963	865-7676
MARTIN BROS	PAUL MARTIN	6880 COUNTY ROAD 48	WILLOWS, CA	95988	934-7517
MARYBELLE FARMS, INC	LEIGH MCDANIEL	4241 COUNTY ROAD S	ORLAND, CA	95963	865-5500
MERLO, ROCQUE	ROCQUE MERLO	PO BOX 814	DURHAM, CA	95938	894-3825
MILLAR FARMS	TOM, MIKE, TOM JR MILLAR	3368 HWY 45	GLENN, CA	95943	826-3244
NEW PRINCESS CORP.	MIKE PERRY	PO BOX 607	ORLAND, CA	95963	865-7676
REIMANN PROPERTIES	NATE KILMER	PO BOX 151	ORLAND, CA	95963	934-5691
RODRIGUEZ, ALFREDO	ALFREDO RODRIGUEZ	PO BOX 981	DURHAM, CA	95938	343-7771
SCHULLER, JOHN	JOHN SCHULLER	PO BOX 21	ARTOIS, CA	95913	330-1822



qnyChlorpyrifosAddresses

SILVEIRA, BOB J.	ROBERT SILVEIRA	3852 RD 99W	ORLAND, CA	95963	865-4196
SPOONER COMPANY	JOHN SPOONER	6789 COUNTY ROAD 39	WILLOWS, CA	95988	934-3690
TAYLOR BROS	BRUCE & JOE TAYLOR	6227 COUNTY ROAD 62	WILLOWS, CA	95988	934-8480
TAYLOR, CHRIS	CHRIS TAYLOR	1024 GREENWICH DR	CHICO, CA	95926	439-2500
THIARA, HARDIAL SINGH	HARDIAL THIARA	6451 COUNTY ROAD 24	ORLAND, CA	9596	865-9106
TRINITY ORCHARDS	JIM QUACKENBUSH	1367 EAST AVE	CHICO, CA	95926	934-7727
VANELLA, ROBERT & SUSAN	BOB VANELLA	3068 CHICO AVE	CHICO, CA	95928	342-8313
VIOLICH, PAUL	DAN CUMMINGS	1750 DAYTON ROAD	CHICO, CA	95928	894-5494
VON BARGEN, SCOTT	SCOTT VON BARGEN	PO BOX 126	ARTOIS, CA	95913	934-3705
WATTS, GREG	GREG WATTS	6399 COUNTY ROAD 48	WILLOWS, CA	95988	934-7660
WATTS, PAUL M	PAUL WATTS	388 N. LASSEN STREET	WILLOWS, CA	95988	934-5242
WESTSTEYN DAIRY 2	BERT WESTSTEYN	1763 S. HEWITT ROAD	LINDEN, CA	95236	(209)886-5334

# COLUSA GLENN SUBWATERSHED PROGRAM

Walker Creek Watershed Water Quality Workshop  
January 16, 2008

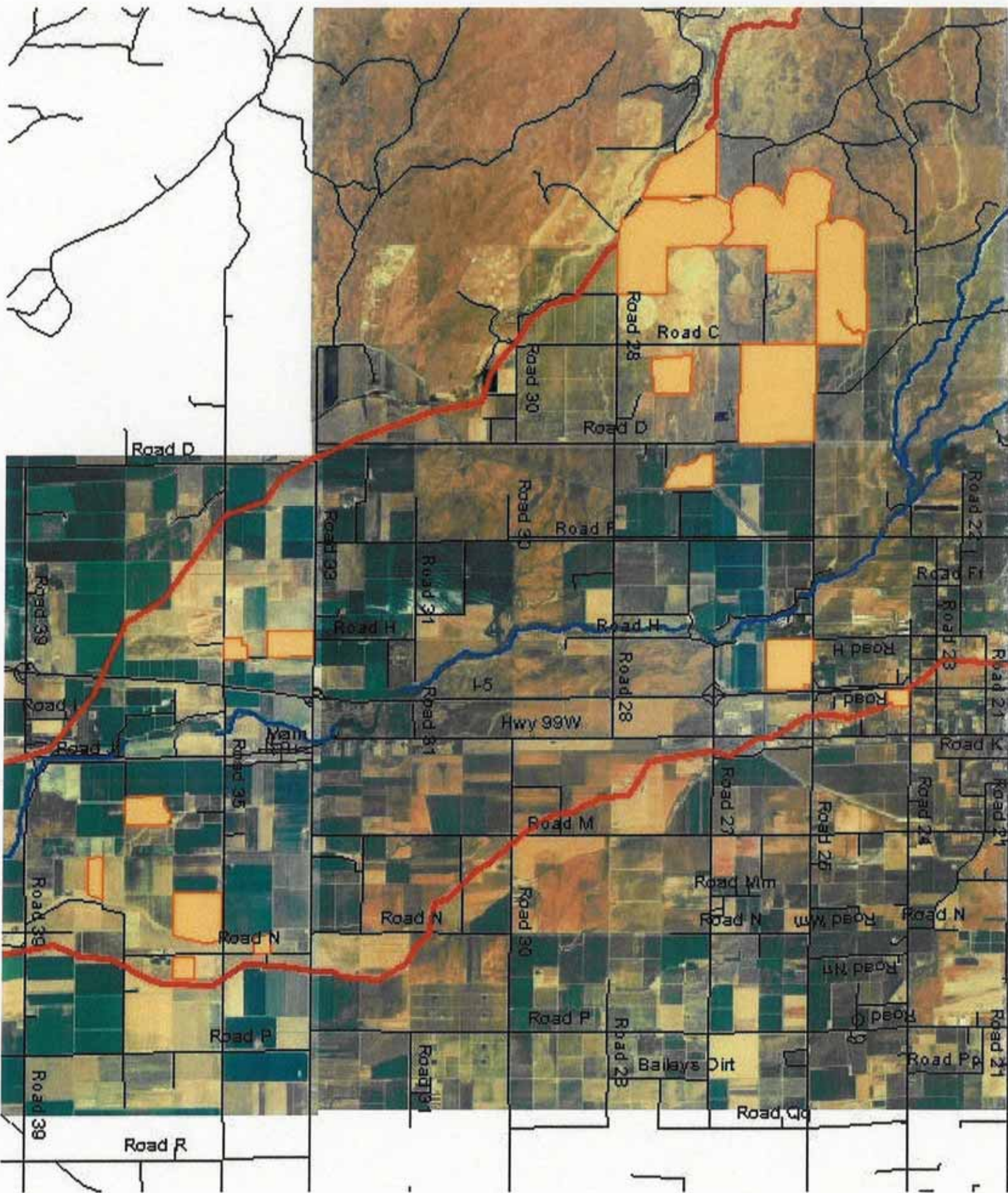
	NAME	MAILING ADDRESS	PHONE NUMBER
1	LARRY MCNEIL		
2	KANDI MAMANT-LIP		
3	Jodi Postma	11020 Suncare Dr. Re	916-464-4858
4	JOY RICKEL CC. DH.	100 Sunrise Blvd STE 100 Colusa 95932	530-458-0580
5	Bob D'Aquila	3068 Chico Ave 95928	342 8313
6	LARRY EMBREY	PO Box 772	865-2118
7	Bob M. Smith	2750 Co Rd F Colusa	934-2753
8	Tom McArthur	3721 McArthur Rd Colusa	343-5727
9	Jerry Schmeier	P.O. Box 180 Colusa 95943	458-0575
10	Greg Watts	6399 Co. Rd 48 Willows	934-7660
11	Frank S. Smith	1606 Capitol St	934-5020
12	Jim S. Carter	P.O. Box 317 Colusa	458-7566
13	Don R. Kennedy	1669 20th Rd Y Colusa	512-0092
14	Bar Westberg	6330 A Rd 39 Willows 95938	934-2337
15	Chris Kohse	1640 Hwy 45 Colusa 95943	934-8200
16	Math Lohr	1640 Hwy 45 Colusa 95943	934-8200
17	Robert S. Sanders	271 E. 4th Ave Chico 95926	895-3840
18	Mark Black	1	934-6501
19	Gary Evans	1640 Hwy 45 Colusa 95943	934-8200
20	Charles Schomauer	P.O. Box 336 Colusa	934-3728
21	Howard K. K.	P.O. Box 103 Artois	934-7578
22	Long D. Smith		

# COLUSA GLENN SUBWATERSHED PROGRAM

Walker Creek Watershed Water Quality Workshop  
January 16, 2008

	NAME	MAILING ADDRESS	PHONE NUMBER
23	John Space	6789 Rd 39	330-1610
24	LEIGH McDaniel	P.O. Box 922 ORLAND	(916) 955-7627
25	Stanley	2611 Co. Rd	530-934-4182
26	John H. Jettler	PO Box 21 AEROS	530-330-1822
27	Jim Quackembul	13952 Carwest Estates Way	521-1501
28	John Williams	5919 Rd 25 Orland	845-1403
29	Wade's Crane	2704 Co. Rd T Orland	934-4469
30	Steve Graward	25800 Post Ave Orland	934-7727
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# Colusa Glenn

## Subwatershed Program

P.O. Box 1205, Willows, California 95988 - Phone (530) 934-8036 - Email [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net)

May 21, 2008

Dear Landowners, Ag Dealers, PCA's, and Operators:

**Please read this carefully.**

This letter serves as a reminder that you, or your clients, participate in the local subwatershed group, the *Colusa Glenn Subwatershed Program*, to meet requirements under the Irrigated Lands Regulatory Program (ILRP). The ILRP is a mandated program through the California Regional Water Quality Control Board, Central Valley Region for growers within the Central Valley who have irrigation water and/or stormwater leaving their irrigated lands.

As spring has come and summer is almost here, we know that it is time to begin using Chlorpyrifos (trade names include Dursban, Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E) on your crops. Application of these products may be by ground or air and include most tree crops and alfalfa.

We strongly encourage that you be very aware of water quality issues with this insecticide and utilize any and all Best Management Practices (BMPs) that are available to you and your operation. For example, control drift when applied, do not over-apply, and most of all be aware that if an exceedance in run-off waters occur, then the local subwatershed group will be forced to conduct additional outreach to its participants, using membership fees. *NOTE:* There have already been two exceedances of this nature within the Walker Creek Watershed area. As a response to these exceedances we held a grower workshop in January 2008 and as required by the Conditional Waiver we now have to prepare a management plan. At this time it is not clear what will be required to comply with these requirements.

For more information in using Chlorpyrifos appropriately to reduce chances of an exceedance, please contact our office at (530) 934-8036 or your local Ag Commissioners office to receive Best Management Practice ideas.

Thank you,

Kandi Manhart  
Outreach & Education

More information on the Irrigated Lands Regulatory Program (ILRP) may be found at:  
[www.waterboards.ca.gov/centralvalley/programs/irrigated\\_lands/index.html](http://www.waterboards.ca.gov/centralvalley/programs/irrigated_lands/index.html)

More information on the Sacramento Valley Water Quality Coalition may be found at: [www.svwqc.org](http://www.svwqc.org)

**Board of Directors**

Colusa County Farmers: Denise Carter, Joe Carrancho, John Garner  
Glenn County Farmers: Larry Domenighini, Greg Overton



# Colusa Glenn

## Subwatershed Program

P.O. Box 1205, Willows, California 95988 - Phone (530) 934-8036 - Email [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net)

July 29, 2008

Dear Landowners, Ag Dealers, PCA's, and Operators:

**Please read this carefully.**

This letter serves as a reminder that you, or your clients, participate in the local subwatershed group, the *Colusa Glenn Subwatershed Program*, to meet requirements under the Irrigated Lands Regulatory Program (ILRP). The ILRP is a mandated program through the California Regional Water Quality Control Board, Central Valley Region for growers within the Central Valley who have irrigation water and/or stormwater leaving their irrigated lands.

As spring has come and summer is here, we know that it is time to use Chlorpyrifos (trade names include Dursban, Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E) on your crops. Application of these products may be by ground or air and include most tree crops and alfalfa.

We strongly encourage that you be very aware of water quality issues with this insecticide and utilize any and all Best Management Practices (BMPs) that are available to you and your operation. For example, control drift when applied, do not over-apply, and most of all be aware that *if an exceedance in run-off waters occur, then the local subwatershed group will be forced to conduct additional outreach to its participants, using membership fees.* **NOTE:** There have already been two exceedances of this nature within the Walker Creek Watershed area. As a response to these exceedances we held a grower workshop in January 2008 and as required by the Conditional Waiver we now have to prepare a management plan. At this time it is not clear what will be required to comply with these requirements.

For more information in using Chlorpyrifos appropriately to reduce chances of an exceedance, please contact our office at (530) 934-8036 or your local Ag Commissioners office to receive Best Management Practice ideas.

Thank you,

Kandi Manhart  
Outreach & Education

More information on the Irrigated Lands Regulatory Program (ILRP) may be found at:  
[www.waterboards.ca.gov/centralvalley/programs/irrigated\\_lands/index.html](http://www.waterboards.ca.gov/centralvalley/programs/irrigated_lands/index.html)

More information on the Sacramento Valley Water Quality Coalition may be found at: [www.svwqc.org](http://www.svwqc.org)

**Board of Directors**

Colusa County Farmers: Denise Carter, Joe Carrancho, John Garner  
Glenn County Farmers: Larry Domenighini, Greg Overton

# Colusa Glenn

## Subwatershed Program

P.O. Box 1205, Willows, California 95988 - Phone (530) 934-8036 - Email [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net)

August 18, 2008

Dear Farm Bureau Member:

**Please read this carefully.**

This letter serves as a reminder that you may participate in the local subwatershed group, the *Colusa Glenn Subwatershed Program*, to meet requirements under the Irrigated Lands Regulatory Program (ILRP). The ILRP is a mandated program through the California Regional Water Quality Control Board, Central Valley Region for growers within the Central Valley who have irrigation water and/or stormwater leaving their irrigated lands.

As spring has come and summer is here, we know that it is time to use Chlorpyrifos (trade names include Dursban, Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E) on your crops. Application of these products may be by ground or air and include most tree crops and alfalfa.

We strongly encourage that you be very aware of water quality issues with this insecticide and utilize any and all Best Management Practices (BMPs) that are available to you and your operation. For example, control drift when applied, do not over-apply, and most of all be aware that *if an exceedance in run-off waters occur, then the local subwatershed group will be forced to conduct additional outreach to its participants, using membership fees.* **NOTE:** There have already been two exceedances of this nature within the Walker Creek Watershed area. As a response to these exceedances we held a grower workshop in January 2008 and as required by the ILRP we now have to prepare a management plan. At this time it is not clear what will be required to comply with these requirements.

For more information in using Chlorpyrifos appropriately to reduce chances of an exceedance, please contact our office at (530) 934-8036 or your local Ag Commissioners office to receive Best Management Practice ideas.

Thank you,

Kandi Manhart  
Outreach & Education

More information on the Irrigated Lands Regulatory Program (ILRP) may be found at:  
[www.waterboards.ca.gov/centralvalley/programs/irrigated\\_lands/index.html](http://www.waterboards.ca.gov/centralvalley/programs/irrigated_lands/index.html)

More information on the Sacramento Valley Water Quality Coalition may be found at: [www.svwqc.org](http://www.svwqc.org)

#### Board of Directors

Colusa County Farmers: Denise Carter, Joe Carrancho, John Garner  
Glenn County Farmers: Larry Domenighini, Greg Overton

# Colusa Glenn

## Subwatershed Program

P.O. Box 1205, Willows, California 95988 - Phone (530) 934-8036 - Email [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net)

May 27, 2009

Dear Landowner:

**Please read this carefully.**

This letter serves as a reminder that you may participate in the local subwatershed group, the *Colusa Glenn Subwatershed Program*, to meet requirements under the Irrigated Lands Regulatory Program (ILRP). The ILRP is a mandated program through the California Regional Water Quality Control Board, Central Valley Region for growers within the Central Valley who have irrigation water and/or stormwater leaving their irrigated lands.

As spring has come and summer is almost here, we know that it is time to use Chlorpyrifos (trade names include Dursban, Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E) on your crops. Application of these products may be by ground or air and include most tree crops and alfalfa.

We strongly encourage that you be very aware of water quality issues with this insecticide and utilize any and all Best Management Practices (BMPs) that are available to you and your operation. For example, control drift when applied, do not over-apply, and most of all be aware that *if an exceedance in run-off waters occur, then the local subwatershed group will be forced to conduct additional outreach to its participants, using membership fees.* **NOTE:** There were two exceedances of this nature within the Walker Creek Watershed area in 2007. In response to the exceedances, we held a grower workshop in January 2008 and as required by the ILRP we have prepared a management plan.

Although in 2008 there were no exceedances, we still want to remind you of the importance to be very aware of the water quality issues this insecticide may cause if not handled or applied according to the label.

For more information in using Chlorpyrifos appropriately to reduce chances of an exceedance, please contact our office at (530) 934-8036 or your local Ag Commissioners office to receive Best Management Practice ideas.

Thank you,

Kandi Manhart  
Outreach & Education

More information on the Irrigated Lands Regulatory Program (ILRP) may be found at:  
[http://www.waterboards.ca.gov/centralvalley/water\\_issues/irrigated\\_lands/](http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/)

More information on the Sacramento Valley Water Quality Coalition may be found at: [www.svwqc.org](http://www.svwqc.org)

### Board of Directors

Colusa County Farmers: Denise Carter, Joe Carrancho, John Garner  
Glenn County Farmers: Larry Domenighini, Greg Overton



# Colusa Glenn

## Subwatershed Program

P.O. Box 1205, Willows, California 95988 - Phone (530) 934-8036 - Email [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net)

### PRESS RELEASE

#### For Immediate Release

**Date: June 3, 2009**

For additional information, please contact Kandi Manhart, Outreach and Education, at (530) 934-8036 or [cgsubwatershed@sbcglobal.net](mailto:cgsubwatershed@sbcglobal.net).

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#### STEWARDSHIP OF CHLORPYRIFOS TO AVOID WATER QUALITY ISSUES

Spring is here. Summer is knocking at the door. Therefore, the *Colusa Glenn Subwatershed Program* knows that it is time to use Chlorpyrifos (trade names include Dursban, Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E) on agricultural crops. Application of these products may be by ground or air and include most tree crops and alfalfa.

For those of you who may not know, although hopefully you do, the Colusa Glenn Subwatershed Program is the local subwatershed program to help irrigated landowners meet requirements of the Irrigated Lands Regulatory Program (ILRP). The ILRP is a mandated program through the California Regional Water Quality Control Board, Central Valley Region for growers within the Central Valley who have irrigation water and/or stormwater leaving their irrigated lands.

In an effort to keep our water quality issues at a minimum, we strongly encourage that handling and applications of this insecticide are according to the label. Also, please utilize any and all Best Management Practices (BMPs) that are available. For example, control drift when applied, do not over-apply, and most of all be aware that *if an exceedance in run-off waters occur, then the local subwatershed program will be forced to conduct additional outreach to its participants using membership fees and will possibly encourage restrictive use of Chlorpyrifos.*

There were two exceedances of this nature in Glenn County within the Walker Creek Watershed area in 2007. In response to the exceedances, we held a grower workshop in January 2008 and as required by the ILRP we have prepared a management plan. Although in 2008 there were no exceedances, we still want to remind everyone of the importance to be very aware of the water quality issues this insecticide may cause if not handled or applied according to the label.

For more information in using Chlorpyrifos appropriately to reduce chances of an exceedance, please contact our office at (530) 934-8036 or your local Ag Commissioners office to receive Best Management Practice ideas.

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